

PDI Work Plan Comment Discussion

*Arkema Project Area
River Mile 7 West*

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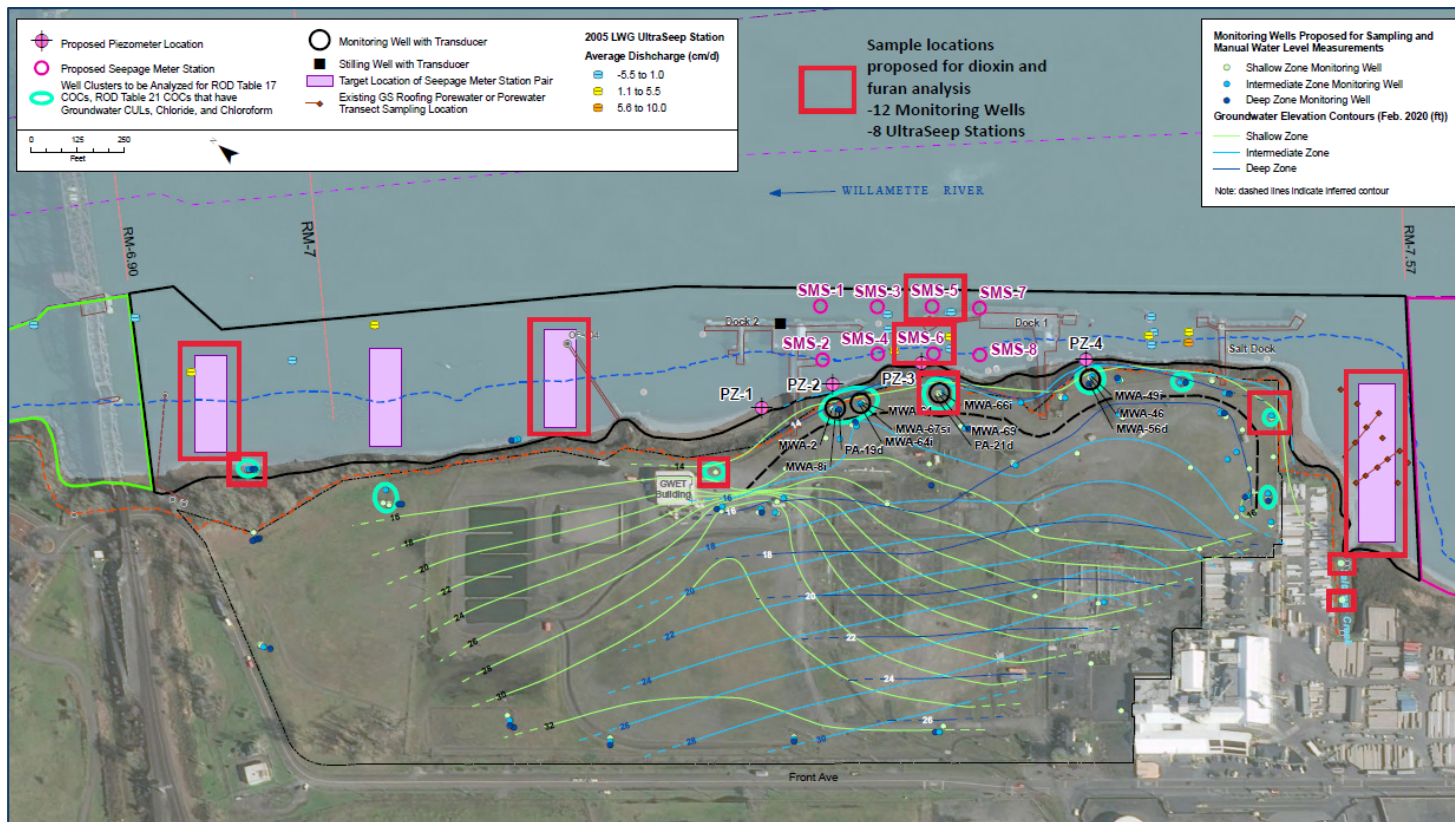


Agenda

- Dioxin and furan sampling for groundwater and porewater (Comment 49)
- NAPL Identification (Comment 39b)
- HxCDF PTW Threshold (Comment 5)

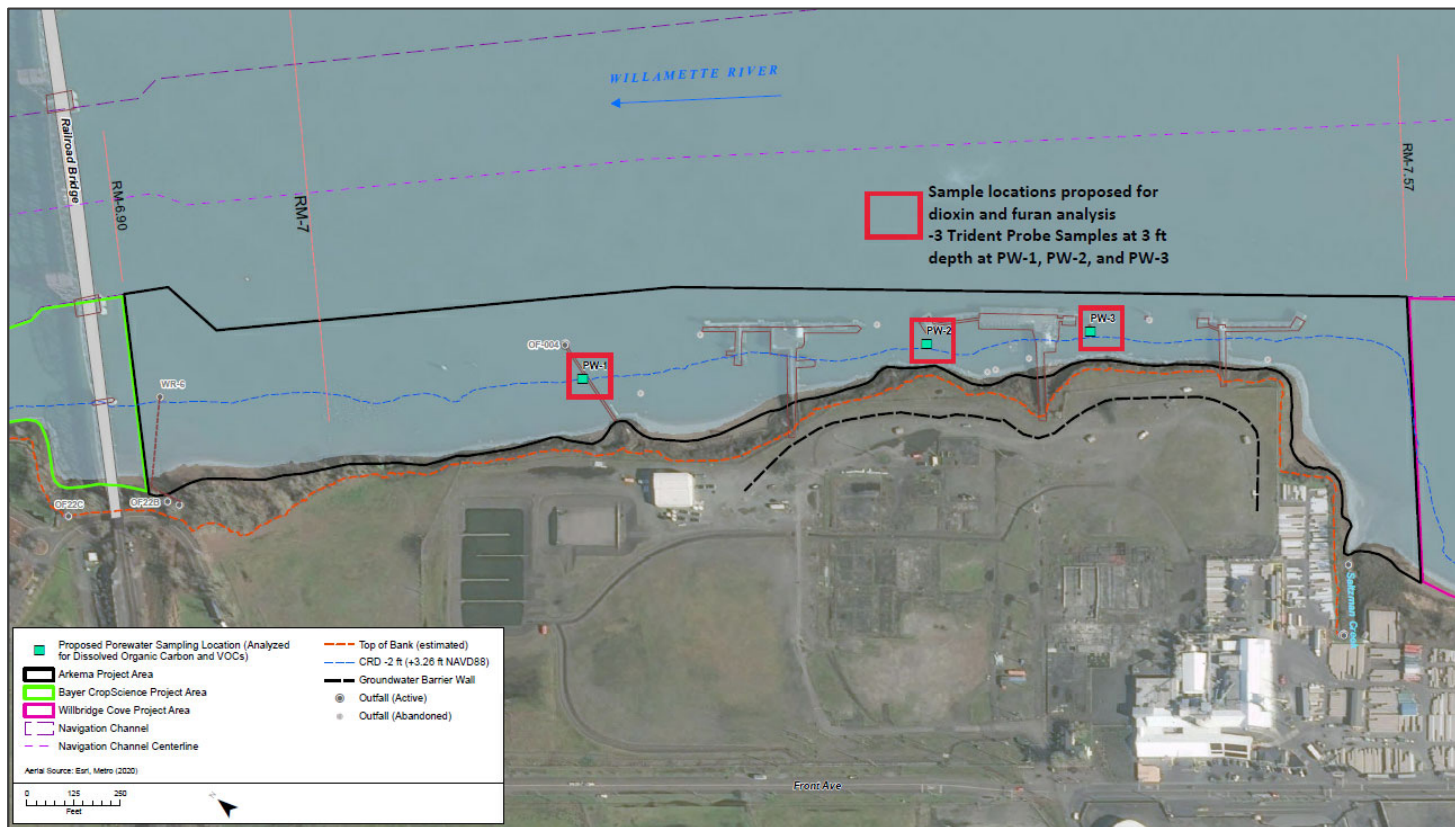
EPA Specific Comment 49

Proposed D/F Sampling – Wells and UltraSeep



EPA Specific Comment 49

Proposed D/F Sampling – Trident Probe



EPA Specific Comment 39b NAPL Identification

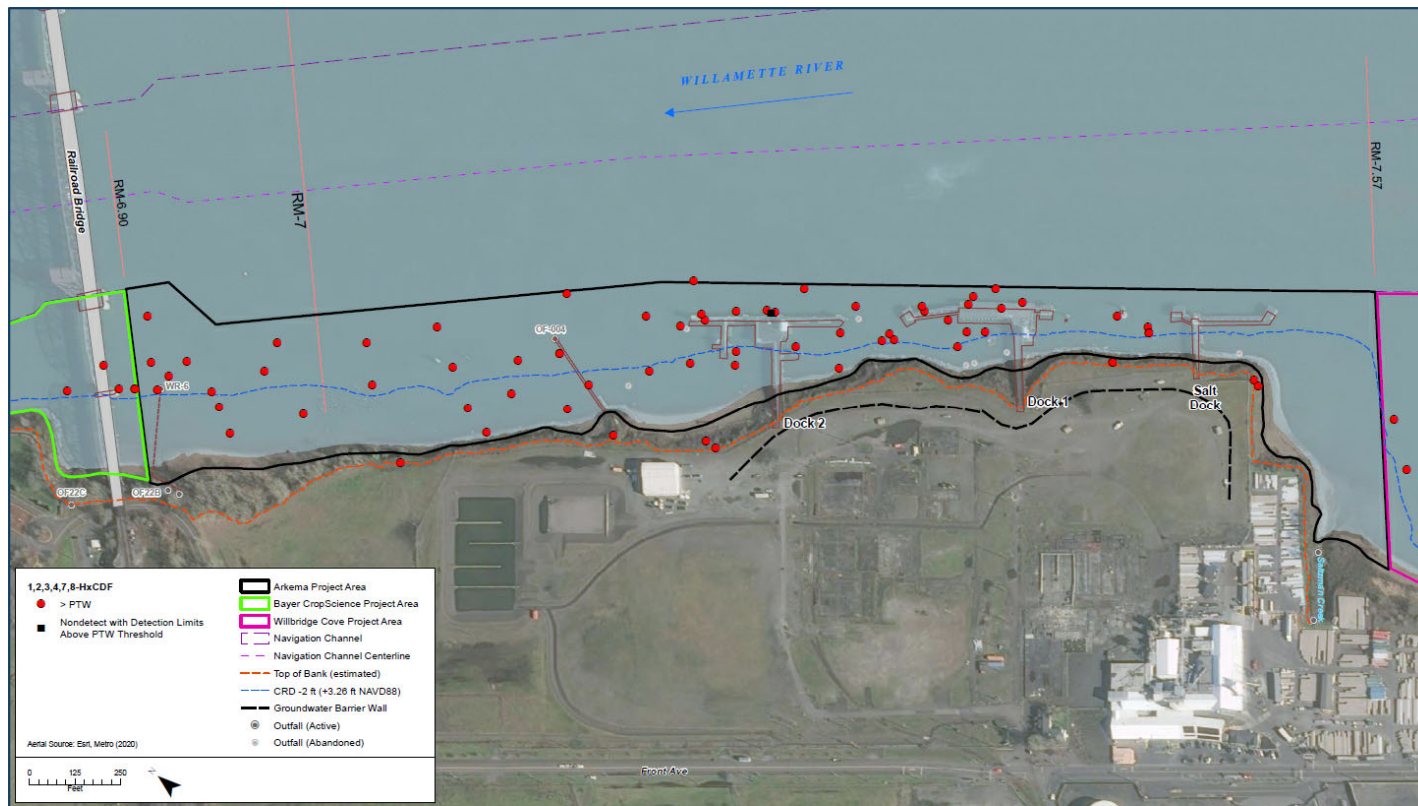
- › LSS received the Gasco presentation on PTW NAPL designation and it provides clarity on the NAPL issue
- › The PDI work plan FSP will be updated for consistency with the EPA-approved Gasco NAPL identification procedures
- › Centrifuging will be removed from the FSP



Site-Specific PTW-NAPL Definition

- PTW-NAPL defined as any layer or seam of product, regardless of thickness, that is clearly defined as liquid NAPL that is also mobile (i.e., "oozes" or "drips" out of the core during core observations)
- See Section 3.6.2.1 of NW Natural's *Statement of Work – Gasco Sediments Site, Portland Harbor Superfund Site, Portland, Oregon* (EPA 2009)

EPA Specific Comment 5—HxCDF PTW Threshold Exceedances



EPA Specific Comment 5—HxCDF Background

FS Appendix B

- › Calculated risk percentages based on **measured fish tissue samples**.
- › These percentages demonstrate the proportional risk associated with each D/F congener.
- › PeCDF and TCDF are the primary risk drivers (>80 percent of the D/F risk in RM 6.5–7.5W).
- › **HxCDF is about 8.3 percent of the RM 6.5–7.5W risk** based on these empirical data.

FS Appendix J

- › Residual risk based on **modeled fish tissue values**.
- › The sediment PTW concentration was apparently based on the modeled risk-based fish tissue concentrations. Can EPA confirm this?
- › The food web model (FWM) used sediment concentrations to back-calculate corresponding fish tissue concentrations.
- › The model shows that current fish tissue should exceed PTW threshold, but sample results do not support this
- › Using the FWM back calculated values, HxCDF appears to have by far the highest risk, **essentially 100% of the RM7W risk**.

EPA Comment 5—HxCDF Fish Tissue Data

- The FWM derives fish tissue concentrations (output) from sediment concentrations (input).
 - No information regarding calibration of the model is available.
- **HxCDF fish tissue concentrations under baseline conditions are below the PTW tissue PRG in all fish samples (whole body and fillet) collected from RM 6.9 to 7.6.**
 - Fillet tissue concentrations were 1 to 3 orders-of-magnitude below the HxCDF PTW PRG.

EPA Comment 5—HxCDF PTW Threshold Approach

- Using other COC CULs as a surrogate for HxCDF PTW is consistent with the ROD and protective of human health and the environment.
 - The ROD allows risk associated with contaminants for which a relationship between fish and/or shellfish tissue and sediment concentrations could not be determined to be addressed by meeting CULs for other COCs.
 - This is the ROD approach for arsenic, hexachlorobenzene, mercury, BEHP, pentachlorophenol, and polybrominated diphenyl ether.
- **We would like to explore options for addressing HxCDF that recognize that this compound is not the significant risk driver at RM7W.**

Discussion/Questions

